

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015929**Date Inspected:** 29-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 6

This QA Inspector Randomly observed the following work in progress:

ZPMC personnel heat straightening OBG member identified as SP3085A. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Xia Yong Zheng was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 8927.

ZPMC personnel heat straightening OBG member identified as DP3113A. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Xia Yong Zheng was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 8928.

BAY- 7

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

Flux Cored Arc Welding (FCAW) of weld joint SP3087-001-009,010. Welder is identified as 204342. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint SP3087-001-054,055. Welder is identified as 053609. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

Shielded Metal Arc Welding (SMAW) Tack welding of weld joint FB4101-001-013,014. Welder is identified as 049771. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- B- P-2112.

SMAW Tack welding of weld joint DP3112-001-009,010. Welder is identified as 049485. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

SMAW Tack welding of weld joint FB4104-001-017,018. Welder is identified as 054456. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

BAY- 8

FCAW of weld joint BK004A4-055-014,015. Welder is identified as 040671. ZPMC Quality Control (QC) is identified as Mr. Yong Qing Feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132.

FCAW of weld joint BK004A7-055-031,032. Welder is identified as 500479. ZPMC Quality Control (QC) is identified as Mr. Yong Qing Feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132.

During the Caltrans Quality Assurance in-process observations of the fabrication of Bike Path(BK) BK004A1-061, this QA Inspector observed ZPMC personnel performing heat straightening on the Top Plate of the bike path which is distorted approx. 15mm in 1000mm. The heat straightening was performed without the engineer's approval. The Bike Path is identified as BK004A1-061. The weld is identified as BK004A1-061-009. The weld is CJP butt joint, joining to Top plate (BKPL1A) to Top plate (BKPL2A). The Material thickness is 16 mm.

This QA generated an Incident Report on this date for the above issue, for further information see the incident report and the attached photos.

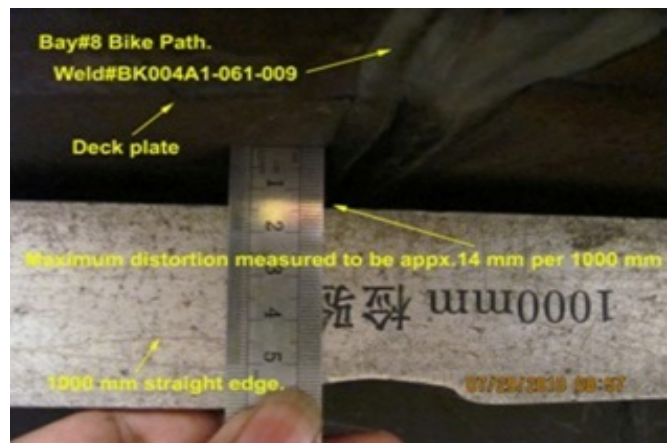
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



## Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Prabhu,Surendra

Quality Assurance Inspector

---

**Reviewed By:** Hall,Steven

QA Reviewer